

JCA Implementation OUSD(AT&L) Update

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Fall 2005 Status

Bottom Line Up Front

- The JCA framework is a positive step forward; a common language is a necessary first step
- What we are missing: "...to what end??"
 - The specific answer to this question will influence the product we produce
 - ...
- *Proceed with Caution*: many mapping exercises ongoing; can become an end in itself, and more importantly, can lead to misleading conclusions (*an example from acquisition will follow*) or artificial divisions of multi-mission asset contributions

What We've Done

- Gathered preliminary feedback from each AT&L organization regarding use and implementation of J CAs
- Performed an initial mapping of DAB programs (MDAPs), AT&L Roadmaps and ACTDs against the Tier 1 and 2 J CAs
- Captured this and other relationships in the Matrix Mapping Tool (MMT) to help implement and track JCA relationships
 - "Mother of all Pointers"
 - AT&L POCs: Ms. Kristen Baldwin (703-695-2300, Dr. Judith Dahmann (697-8551)

Numbers of MDAPs* by J CAs

What does this tell us?

*There are 88 MDAPS

MDAP investments (FY05 \$B) across J CAs**

Total of all appropriations (\$65B)
Because programs appear in
multiple J CAs, Total=\$586B

Joint capability or
a lot of stovepipes?

**A portion of
'M' in DOTMLPF

Data represents 71 of the 88 MDAPS

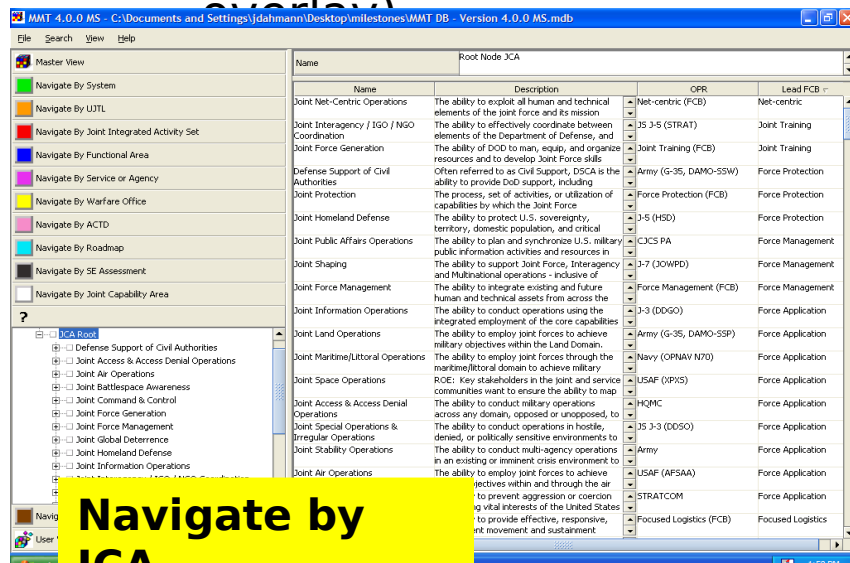
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Update

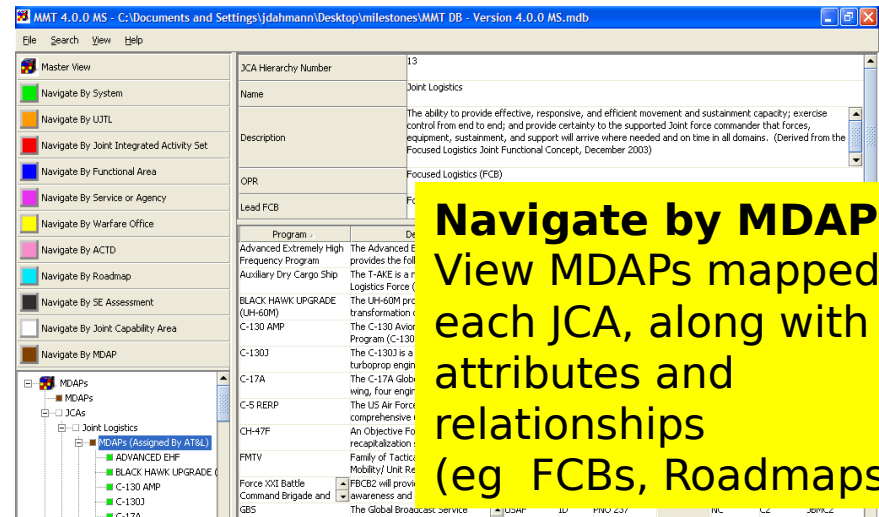
- In AT&L today JCAs are primarily used to characterize issues or actions (as a point of reference) under the associated FCBs
 - Aid in communication
 - Included in the new draft of the 'Roadmap Atlas' as a point for reference for new roadmaps
 - "The framework for all Capability Roadmaps is identified in the Tier 1 Joint Capability Areas (JCA)" p4
- Capability Roadmaps** Definition, Development, and Implementation "Rules of the Road"; 3 March 2006
- Actions since Fall 05:
 - Integrated JCA mappings and functions into Matrix Mapping Tool
 - Assessed mapping results
 - Investigated options for applying JCAs to AT&L processes

Update: Incorporated JCAs into MMT

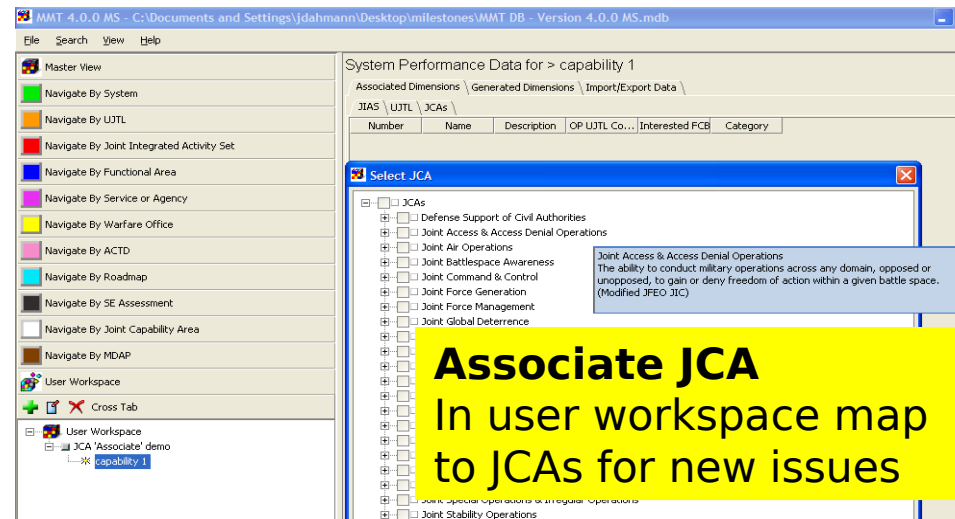
- Added MMT “navigate by....” and “Associate ...” JCAs
 - Applied in assessments (e.g. Homeland Defense, JCA assessment overlay)



Navigate by JCA
View JCAs along with associations MDAPs, ACTDs.. And eventually PEs, UJTLLs, etc



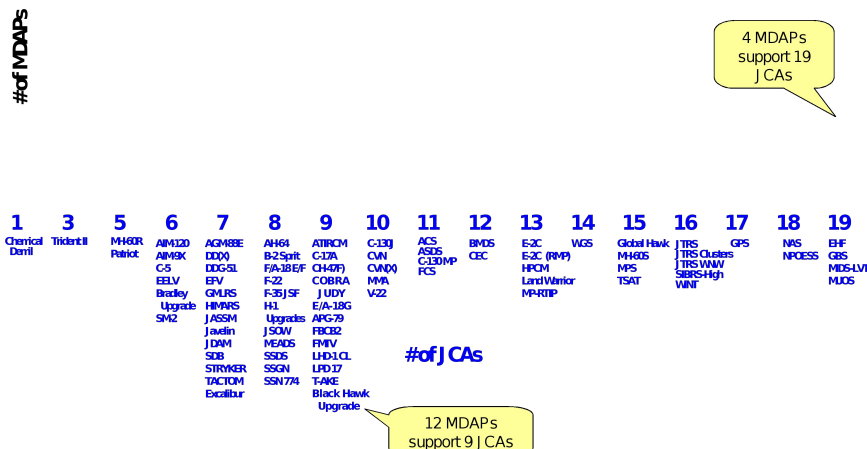
Navigate by MDAP
View MDAPs mapped to each JCA, along with attributes and relationships (eg FCBs, Roadmaps)



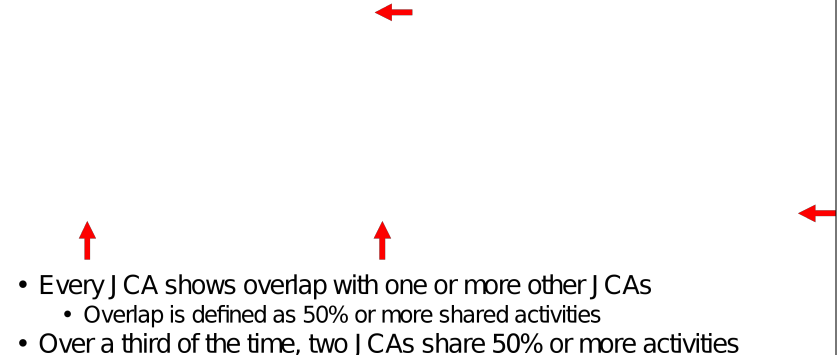
Associate JCA
In user workspace map to JCAs for new issues

AT&L JCA Assessment

- MDAP distribution driven by the multi-mission nature of the systems and the inherent overlap in the JCAs themselves
- Using MMT cross-referencing function, we compared capabilities called out for each Tier 1 JCA
 - Percentage of shared activities reflects relationships among different capability areas; Overlap is defined as 50% or more shared activities
- Found
 - Every JCA shows overlap with one or more other JCAs
 - Over a third of the time, two JCAs share 50% or more activities



Activity Overlaps Among 21 J CAs



Options

- Degree of JCA overlap limits utility of JCAs for acquisition and programming use
- Options to address degree of overlap
 - 1) Scope the JCAs to make areas more discrete or independent*
 - Current reviews are identifying and clarifying areas of overlap
 - However, some category overlaps are product of interrelationships in reality; JCA OPRs don't want to lose this
 - 2) Alter the way the JCAs are applied to reflect their interrelationships
 - Rather than 21 peer level categories, group JCAs by type
 - Alter the way the JCAs are applied, rather than altering the JCAs themselves
- This briefing describes our ongoing analysis of the second option

*** This was the intent of AT&L Comments to SD106**

A Notional “Overlay” of the JCAs

Current 21 JCAs can be grouped in terms of the type of capability they describe

Enabling

Joint Battlespace
Awareness
Joint Command &
Control
Joint Logistics
Joint Net-Centric
Operations

Institutional

Force Generation
Force Management
Joint Interagency / IGO / NGO Coordination
Public Affairs

Effects

Joint Air Operations
Joint Land Operations
Joint Maritime/
Littoral Operations
Joint Protection
Joint Space
Operations
Joint Special
Operations

Composite

Joint Access &
Access Denial
Operations
Joint Global
Deterrence
Joint Homeland
Defense
Joint Stability
Operations
Defense Support
of Civil
Authorities
Shaping

Enabling JCAs

Functionality needed across different types of engagements to enable war fighting (e.g. C2, Battlespace Awareness)

Effects JCAs

Operational effects in different warfighting domains (e.g. Land, Air ...)

Composite JCAs

Use of a set of capabilities drawn from Enabler and Effects JCAs to achieve an objective

Institutional JCAs

Capabilities needed to provide institutional support for battlespace operations (e.g. Force Generation)

Distribution of MDAPs Across “Effects” JCAs

	Effects													
	J oint Air Operations		J oint Land Operations		J oint Maritime Operations		J oint Protection		J oint Space Operations		J oint Special Operations		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Enablers	37	58%	41	58%	42	61%	22	79%	8	67%	39	67%	48	55%
Effectors	27	42%	30	42%	27	39%	6	21%	4	33%	19	33%	40	45%
Total	64		71		69		28		12		58		88	

- MDAPs divide more discretely into ‘Enablers’ or ‘Effectors’
- Overall, just over half (55%) of the MDAPs are ‘**Enablers**’
 - i.e. systems that address one or more Enabler JCA
 - The remaining systems (**‘Effectors’**) address one or more Effects JCAs and no Enabling JCAs
- “Effects” JCAs include all activities (and supporting systems) applicable to that effect area -- both enablers and effectors

Homeland Defense as a 'Composite' JCA

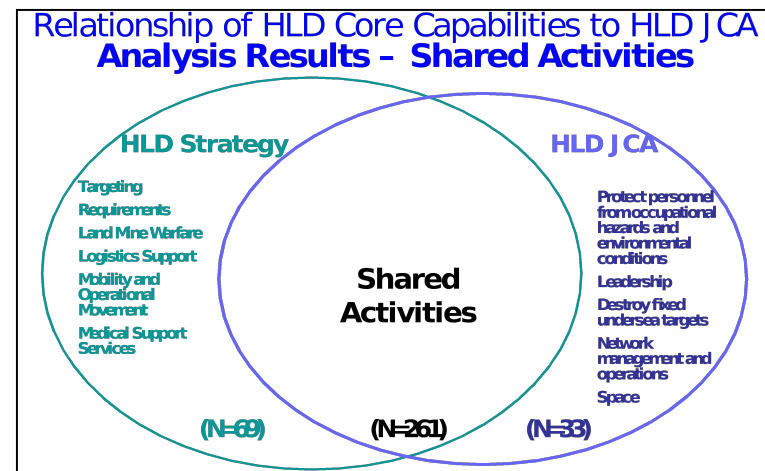
- Compared capabilities in the DOD Homeland Defense Strategy with the JCAs: greater than 50% shared activities

HLD Strategy Objectives

21 Joint Capability Areas



- Identified areas where HLD JCA and HLD Strategy should be aligned



Summary

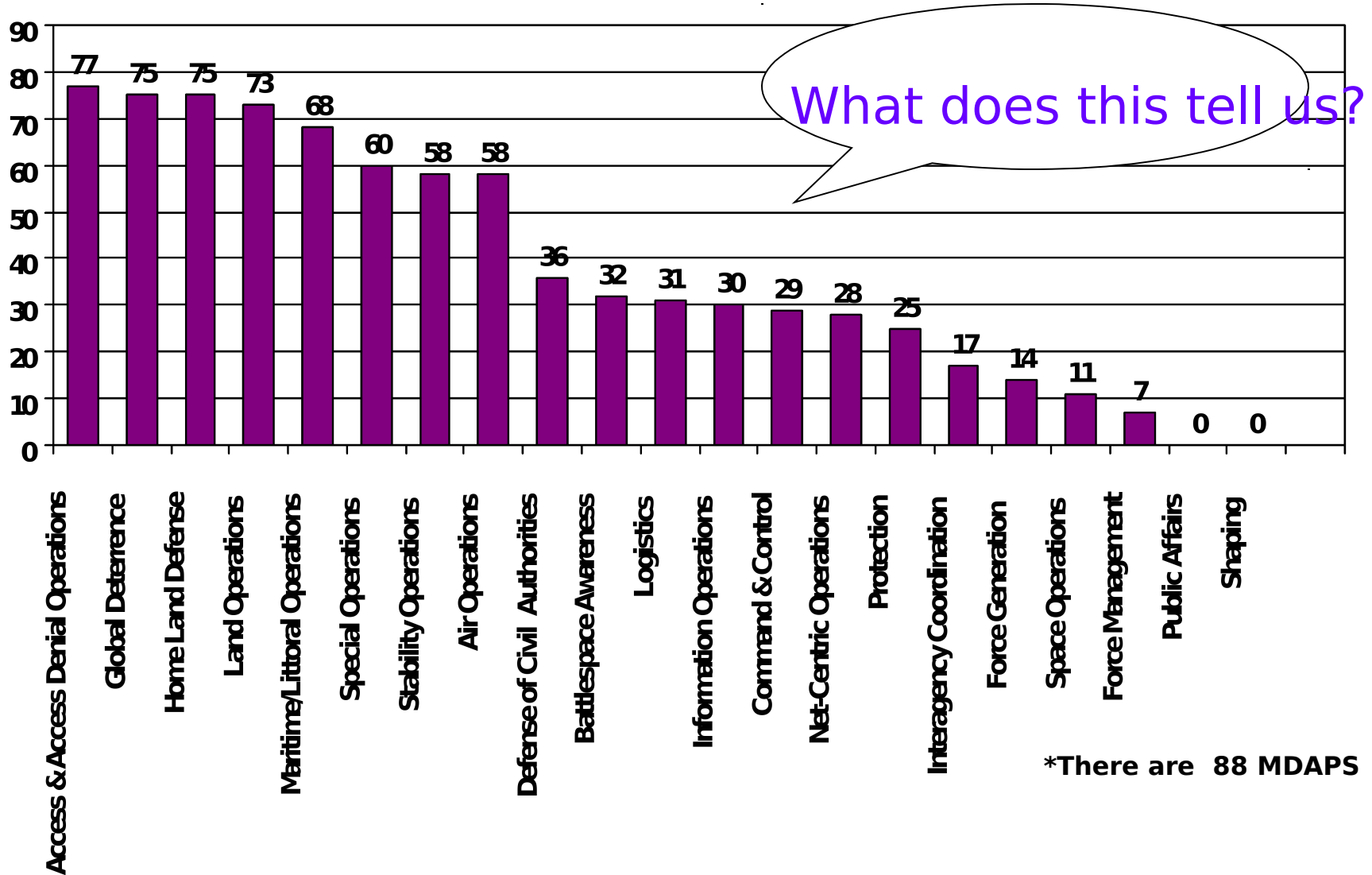
- JCAs currently provide a framework for cross DOD capabilities discussion
- Applying the current JCAs using an 'overlay' provides a mechanism to manage the complexity introduced by JCA interrelationships
 - Alternative application approaches could provide a more discrete set of capability portfolios without changing the categories or definitions
 - Options such as this should be investigated as we gain experience with the JCAs
- Goal is to enhance JCA utility to support decision making

Recommendations

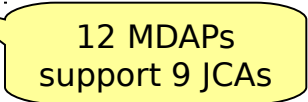
- We continue to support the view we expressed in Fall 2006
 - The next evolution of JCAs should depend on how we intend to use them (“to what end?”)
 - Resolve the “intent” before further refinement of the lexicon and taxonomy is done – the intent will influence the product evolution
 - Complete a (conceptual) “trial run” of how this could be implemented to elicit the issues
 - Once the above is settled, define coordinated milestones for roll-out of all key stakeholders

Backup Slides

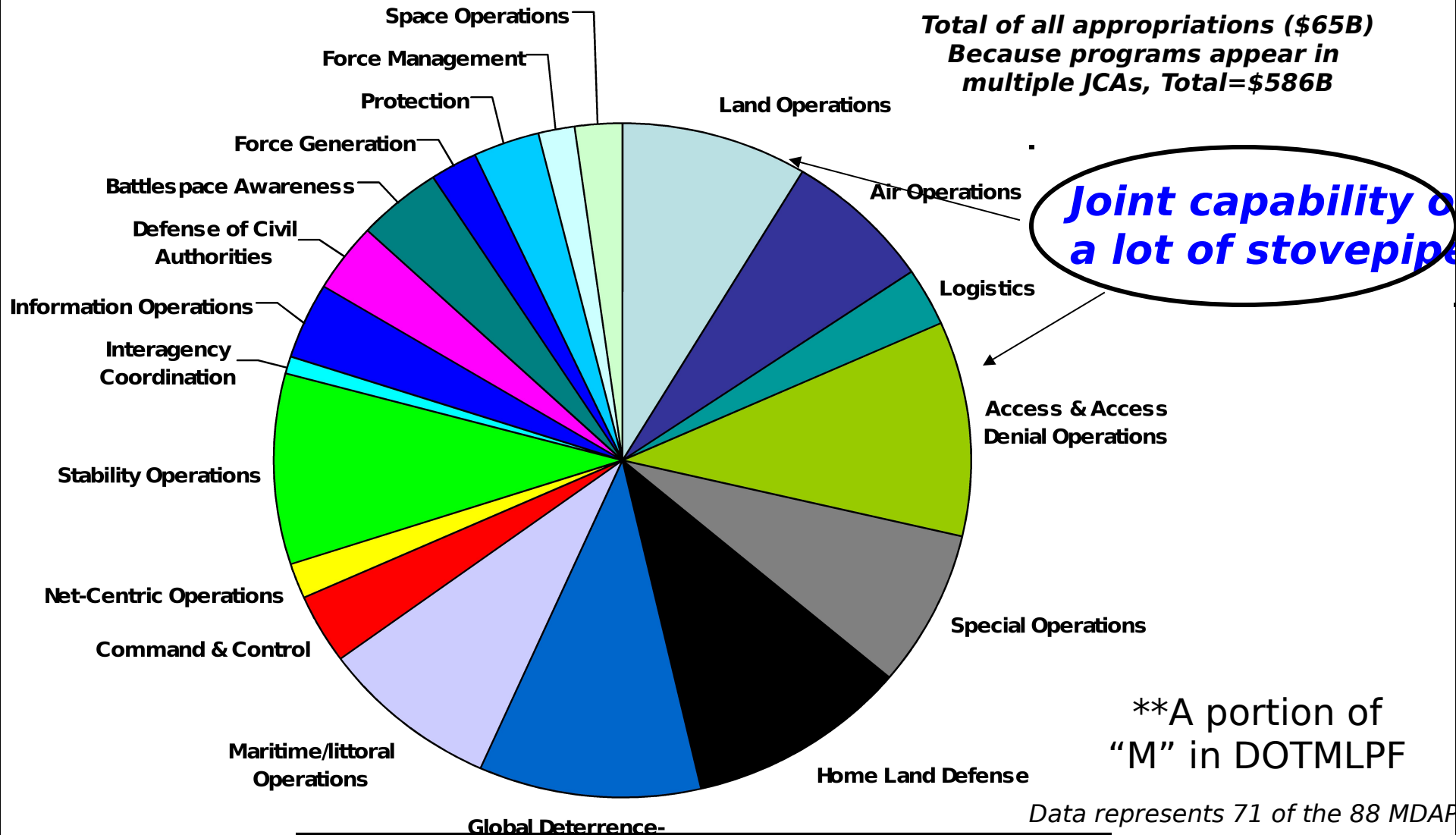
Numbers of MDAPs* by JCAs



Appendices



MDAP investments (FY05 \$B) across JCAs**



**A portion of
"M" in DOTMLPF

Data represents 71 of the 88 MDAP

DOES THIS PAINT AN ACCURATE PICTURE?

AT&L JCA Assessment

- Using MMT cross-referencing function, we compared capabilities called out for each Tier 1 JCA
 - Percentage of shared activities reflects relationships among different capability areas

- JCAs are mapped to operational activities
- Activities mapped to the Tier 2 JCAs are rolled up under Tier 1
- This mapping can be used to cross reference activities mapped across the 21 JCA Tier 1

- Count of activities that map to each JCA
- Count of activities that map to both JCAs
- Percentage of activities mapped to Joint Air Operations JCA which are also mapped to Joint Access Denial JCA
- A higher percentage of shared activities indicates a stronger relationship between the JCAs

	Count	Defense Support of Civil Authorities	Joint Access & Access Denial	Joint Air Operations	Joint Battlespace Awareness	Joint Command & Control	Joint Force Generation	Joint Force Management	Joint Global Deterrence
Defense Support of Civil Authorities	82								
Joint Access & Access Denial	217	66 80%							
Joint Air Operations	114	33 40%	79 69%						
Joint Battlespace Awareness	136	26 32%	72 53%	59 52%					
Joint Command & Control	138	19 23%	34 25%	47 37%					
Joint Force Generation	38	13 16%	25 66%	18 16%					
Joint Force Management	61	2 2%	3 1%	14 12%					
Joint Global Deterrence	173	55 67%	109 50%	73 64%					

Activity Overlaps Among 21 JCAs

	Count	Intelligence Support Civil Authorities	Int Access & Access Denial Operations	Int Air Operations	Int Battlespace Awareness	Int Command & Control	Int Force Generation	Int Force Management	Int Global Deterrence	Int Homeland Defense	Int Information Operations	Int Interagency GO / NGO Coordination	Int Land Operations	Int Logistics	Int Maritime/Littoral Operations	Int Net-Centric Operations	Int Protection	Int Space Operations	Int Special Operations & Operations & Regular Operations	Int Stability Operations
Defense Support of Civil Authorities	82																			
Joint Access & Access Denial	217	66 30% 80%							50% or more IAS in common in those two JCAs											
Joint Air Operations	114	33 29% 40%	79 69% 36%						Greater than 70% IAS in common in those two JCAs											
Joint Battlespace Awareness	136	26 19% 32%	72 53% 33%	59 43% 52%					Greater than 80% IAS in common in those two JCAs											
Joint Command & Control	138	19 14% 23%	34 25% 16%	47 30% 37%	70 51% 51%															
Joint Force Generation	38	13 34% 16%	25 66% 12%	18 47% 16%	10 26% 7%	13 34% 9%														
Joint Force Management	61	2 3% 2%	3 5% 1%	14 23% 12%	5 8% 4%	57 93% 41%	5 8% 13%													
Joint Global Deterrence	173	55 32% 67%	109 63% 50%	73 42% 64%	103 60% 76%	69 40% 50%	15 9% 36%	22 13% 36%												
Joint Homeland Defense	288	62 22% 76%	173 60% 80%	92 32% 81%	130 45% 96%	106 37% 77%	19 7% 50%	37 13% 61%	169 59% 98%											
Joint Information Operations	71	19 27% 23%	53 75% 24%	47 66% 41%	42 59% 31%	18 25% 13%	3 4% 8%	8 11% 13%	43 61% 25%	67 94% 23%										
Joint Interagency / IGO / NGO	18	4 22% 5%	2 11% 1%	2 11% 2%	9 50% 7%	3 17% 2%	5 28% 13%	0 0% 0%	6 33% 3%	17 94% 6%	0 0% 0%									
Joint Land Operations	120	45 38% 55%	101 84% 47%	59 49% 52%	20 17% 15%	29 24% 21%	21 18% 55%	15 13% 25%	43 36% 25%	87 73% 30%	26 22% 37%	2 2% 11%								
Joint Logistics	132	35 27% 43%	77 58% 35%	29 22% 25%	44 33% 32%	69 52% 50%	26 20% 68%	36 27% 59%	65 49% 38%	72 55% 25%	1 1% 1%	3 2% 17%	44 33% 37%							
Joint Maritime/Littoral	140	45 32% 55%	117 84% 54%	66 47% 58%	38 20% 21%	30 21% 22%	21 15% 55%	15 11% 25%	59 42% 34%	108 77% 38%	28 20% 39%	3 2% 17%	96 69% 80%	46 33% 35%						
Joint Net-Centric Operations	59	5 8% 6%	17 29% 8%	8 14% 7%	25 42% 18%	16 27% 12%	8 14% 21%	0 0% 0%	21 36% 12%	58 98% 20%	9 15% 13%	13 22% 72%	10 17% 8%	8 14% 6%	11 19% 8%					
Joint Protection	43	1 2% 1%	36 84% 17%	4 9% 4%	8 19% 6%	4 9% 3%	1 2% 0%	0 0% 0%	5 12% 3%	47 98% 15%	17 40% 23%	1 2% 1%	27 63% 23%	1 2% 1%	24 56% 17%	21 49% 36%				
Joint Space Operations	14	4 29% 5%	8 57% 4%	4 29% 4%	7 50% 5%	3 21% 2%	0 0% 0%	0 0% 0%	6 43% 3%	10 71% 3%	4 29% 6%	0 0% 0%	3 21% 3%	2 14% 2%	2 14% 1%	0 0% 0%	0 0% 0%			
Joint Special Operations & Operations & Regular Operations	118	35 30% 43%	94 80% 43%	72 61% 63%	43 36% 32%	24 20% 17%	14 12% 37%	11 9% 18%	57 48% 33%	90 76% 31%	40 34% 56%	3 3% 17%	69 58% 58%	28 24% 21%	87 69% 59%	8 7% 14%	19 16% 44%	2 2% 14%		
Joint Stability Operations	180	58 32% 71%	159 88% 73%	57 32% 50%	69 38% 51%	39 22% 28%	21 12% 55%	10 6% 16%	93 52% 54%	139 77% 48%	40 22% 56%	0 0% 0%	81 45% 68%	72 40% 55%	93 52% 66%	9 5% 15%	30 17% 70%	3 2% 21%	85 47% 72%	

- Every JCA shows overlap with one or more other JCAs
 - Overlap is defined as 50% or more shared activities
- Over a third of the time, two JCAs share 50% or more activities

Relationship of HLD Core Capabilities to JCAs **Overview**

- The Joint Capabilities Areas (JCAs) have been created to align DoD processes to better support priority DoD capabilities
- One of the 21 Tier 1 JCAs is Homeland Defense
- If the HLD strategy is to be implemented within current DoD processes alignment with the HLD JCA would be important
- Consequently, an assessment of the relationship between the HLD strategy capabilities and the current JCAs was conducted

This assessment examines the relationship between the strategy and the Joint Capability Areas in more detail

Relationship of HLD Core Capabilities to JCAs

Assessment Methodology

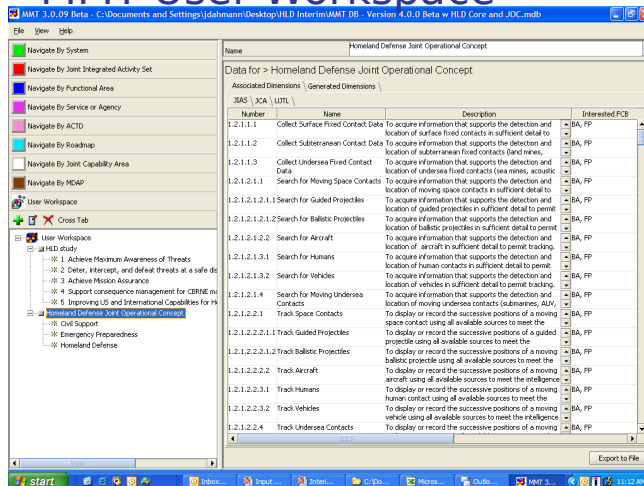
• Source

- Joint Capability Area (JCA) Lexicon (J7) (August 2005)

• Approach

- As described in discussion of the assessment of relationships among HLD objectives, an MMT user workspace was created where
 - HLD core capabilities are mapped to operational activities (JIAS)
- The JCAs have also been mapped to activities in MMT as part of AT&L JCA implementation
- Using the cross referencing function in MMT
 - The relationship between the HLD Core Capabilities and the JCA capabilities areas was examined
 - Differences between the HLD Strategy Core Capabilities and the HLD JCA are identified

MMT User Workspace



Comparing the HLD JCA and the HLD Strategy

HLD Strategy

Achieve maximum awareness of threats

Capable and agile defense intelligence architecture
Collect, analyze, and understand potential threats
Detection, identification, and tracking of emerging threats in all operational domains
Shared situational awareness within DoD and with domestic and foreign partners

Deter, intercept, and defeat threats at a safe distance

In the maritime... approaches
Land Operational Domain
In the...air approaches

Achieve Mission Assurance

Ensure Force Protection	against
Preparedness and protection of defense critical infrastructure (DCI)	
Preparedness of the Defense Industrial Base	
Preparedness to protect designated national critical infrastructure	prevent, and
Defense crisis management and DoD continuity preparedness	[HLS JOC]

Support consequence management for CBRNE mass-casualty attacks

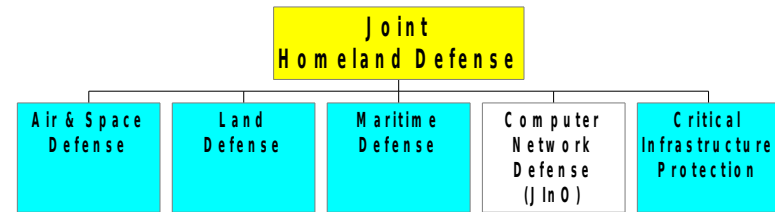
Consequence management assistance for domestic CBRNE mass casualty attacks
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Improving US and International Capabilities for HLD and HLS

Interagency planning and interoperability	prevent, [HLS]
Improved Federal, state, and local partnership capacity and effective domestic relationships	
Improved international partnership capacity and effective defense to defense relationships	ability to assets, to the

- HLD JCA has broad categories with brief descriptions
- HLD Strategy has more discrete categories with more specific descriptions

HLD JCA



The ability to protect U.S. sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. (Draft HD/CS Strategy)

Air & Space Defense – The ability to detect, deter, prevent, and defeat air, missile, and space threats against the Homeland. [HLS JOC]

Land Defense – The ability to detect, deter, and defeat land threats against the Homeland.

Maritime Defense – The ability to detect, deter, and defeat maritime threats against the Homeland. [JOC]

Critical Infrastructure Protection (CIP) – The ability to identify, assess, and enhance the security of physical and cyber assets, and associated infrastructures essential to the execution of the National Military Strategy. [Derived from DoD Directive]

Relationship of HLD Core Capabilities to JCAs

Analysis Table II.2.3

	Count	Defense Support of Civil Authorities	Joint Access & Access Denial Ops	Joint Air Ops	Joint Battlespace Awareness	Joint Command & Control	Joint Force Generation	Joint Force Mgt	Joint Global Deterrence	Joint Homeland Defense	Joint Info Ops	Joint Inter-agency / IGO / NGO Coord	Joint Land Ops	Joint Logistics	Joint Maritime / Littoral Ops	Joint Net-Centric Ops	Joint Protection	Joint Space Ops	Joint Special & Irregular Ops	Joint Stability Ops
		85	226	127	177	138	38	76	173	288	73	18	128	143	140	59	43	15	118	180
1 Achieve Maximum Awareness of Threats	114	27 24% 32%	55 48% 24%	63 55% 50%	111 97% 63%	47 41% 34%	12 11% 32%	17 15% 22%	71 62% 41%	107 94% 37%	35 31% 48%	17 15% 94%	29 25% 23%	21 18% 15%	32 28% 23%	34 30% 58%	4 4% 9%	5 4% 33%	42 37% 36%	40 35% 22%
2 Deter, intercept, and defeat threats	86	31 36% 36%	85 99% 38%	29 34% 23%	3 3% 2%	0 0% 0%	0 0% 0%	0 0% 0%	35 41% 20%	81 94% 28%	19 22% 26%	0 0% 0%	59 69% 46%	18 21% 13%	64 74% 46%	9 10% 15%	24 28% 56%	0 0% 0%	34 40% 29%	58 67% 32%
3 Achieve Mission Assurance	98	24 24% 28%	75 77% 33%	36 37% 28%	28 29% 16%	17 17% 12%	19 19% 50%	8 8% 11%	20 20% 12%	62 63% 22%	13 13% 18%	8 8% 44%	49 50% 38%	37 38% 26%	55 56% 39%	19 19% 32%	22 22% 51%	5 5% 33%	34 35% 29%	65 66% 36%
4 Support consequence mgmt for CBRNE	95	29 31% 34%	62 65% 27%	27 28% 21%	52 55% 29%	24 25% 17%	16 17% 42%	3 3% 4%	47 49% 27%	67 71% 23%	0 0% 0%	11 12% 61%	38 40% 30%	48 51% 34%	33 35% 24%	28 29% 47%	12 13% 28%	3 3% 20%	32 34% 27%	52 55% 29%
5 Improving US and Int'l Capabilities	125	28 22% 33%	36 29% 16%	33 26% 26%	68 54% 38%	74 59% 54%	21 17% 55%	46 37% 61%	47 38% 27%	85 68% 30%	14 11% 19%	16 13% 89%	36 29% 28%	67 54% 47%	33 26% 24%	34 27% 58%	5 4% 12%	3 2% 20%	21 17% 18%	25 20% 14%

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Multiple JCAs are related to the HLD Core Capabilities

Relationship of HLD Core Capabilities to HLD JCA

Analysis Results - Shared Activities

